PUBLIC NOTICE

CHARLESTON DISTRICT, CORPS OF ENGINEERS 69A Hagood Avenue Charleston, South Carolina 29403-5107

and the

S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL OFFICE OF OCEAN AND COASTAL RESOURCE MANAGEMENT

1362 McMillan Avenue, Suite 400 Charleston, South Carolina 29405

REGULATORY DIVISION

Refer to: P/N # 2007-02631-2IG-REVISED - 5

18 JANUARY2008

Pursuant to Section 10 of the Rivers and Harbors Act of 1899 (🐧 403), Sections 401 and 404 of the Clean Water Act (33 U.S.C. 1344), and the South Carolina Coastal Zone Management Act (48-39-10 et.seq.) an application has been submitted to the Desertment of the Army and the S.C. Department of Health and Environmental Control by

THE CITY OF THE ISLE OF PALMS C/O TIMOTHY KANA **COASTAL SCIENCE & ENGINEEERING POST OFFICE BOX 8056** COLUMBIA, SOUTH CAROLINA 29202-8056

for a permit to perform beach renourishment along the edge of the

ATLANTIC OCEAN

at a location, on the ocean shoreline from 47th Avenue to an existing groin along Dewees Inlet, on the northeast end of the Isle of Palms, in Charleston County, South Carolina. (Latitude 32.81259° - Longitude -79.71985°)

PLEASE NOTE: THIS PROJECT HAS BEEN REVISED FROM THE ORIGINAL PROJECT ADVERTISED ON NOVEMBER 30, 2007 (PN#SAC-2007-02631-2IG). ONLY COMMENTS IN RESPONSE TO THIS PUBLIC NOTICE WILL BE REVIEWED.

In order to give all interested parties an opportunity to express their views

NOTICE

is hereby given that written statements regarding the proposed work will be received by both of the above mentioned offices until

12 O'CLOCK NOON, TUESDAY, FEBRUARY 19, 2008

from those interested in the activity and whose interests may be affected by the proposed work.

The proposed work consists of placement via hydraulic dredge of up to 885,000 cubic yards of beach quality sediment along 13,785 feet of the ocean shoreline from 47th Avenue to an existing groin along Dewees Inlet (approximately 126 acres). The applicant proposes to borrow sand from a ridge located approximately 3 miles offshore (approximately 75 acres). The originally proposed borrow area has been modified by the addition of three other borrow areas designated B, C, and D in accordance with preliminary guidance and recommendations from

Refer to: P/N # SAC-2007-02631-2IG-REVISED

the S. C. Department of Natural Resources and analyses of sediment quality from 24 additional borings obtained by the applicant. The proposed beach nourishment is expected to provide benefits for an estimated ten-year life (in terms of greater beach width compared with present conditions). The applicant proposes to conduct the work during the earliest feasible time between April and July 2008. The purpose of the proposed work as stated by the applicant is for beach restoration, including: restoration of the recreational beach along the northeast erosion zone of the Isle of Palms from 47th Avenue to the existing terminal groin along Dewees Inlet; restore a protective beach seaward of buildings; constrict a small artificial dune along approximately 3,500 linear feet of Reach 3 which will accelerate natural formation of a protective dune; place nourishment volumes of variable section densities so as to reduce the variability of beach width caused by inlet sand-bypassing processes; provide a protective buffer between existing infrastructure and the ocean; improve the overall aesthetics of the beach and enhance its recreational value. The project is locally sponsored and will not involve federal funds.

NOTE: Plans depicting the work described in this notice are available and will be provided, upon receipt of a written request, to anyone that is interested in obtaining a copy of the plans for the specific project. The request must identify the project of interest by public notice number and a self-addressed stamped envelope must also be provided for mailing the drawings to you. Your request for drawings should be addressed to the

U.S. Army Corps of Engineers ATTN: REGULATORY DIVISION 69A Hagood Avenue Charleston, South Carolina 29403-5107

The District Engineer has concluded that the discharges associated with this project, both direct and indirect, should be reviewed by the South Carolina Department of Health and Environmental Control in accordance with provisions of Section 401 of the Clean Water Act. As such, this notice constitutes a request, on behalf of the applicant, for certification that this project will comply with applicable effluent limitations and water quality standards. The work shown on this application must also be certified as consistent with applicable provisions the Coastal Zone Management Program (15 CFR 930). The District Engineer will not process this application to a conclusion until such certifications are received. The applicant is hereby advised that supplemental information may be required by the State to facilitate the review.

This notice initiates the Essential Fish Habitat (EFH) consultation requirements of the Magnuson-Stevens Fishery Conservation and Management Act. Implementation of the proposed project would impact 201 acres of estuarine substrates and emergent wetlands utilized by various life stages of species comprising the red drum, shrimp, and snapper-grouper management complexes. Our initial determination is that the proposed action would not have a substantial individual or cumulative adverse impact on EFH or fisheries managed by the South Atlantic Fishery Management Council and the National Marine Fisheries Service (NMFS). Our final determination relative to project impacts and the need for mitigation measures is subject to review by and coordination with the NMFS.

The District Engineer has consulted the most recently available information and has determined that the project is likely to adversely affect the loggerhead sea turtle (*Caretta caretta*). This public notice serves as a request to the U.S. Fish and Wildlife Service and/or the National Marine Fisheries Service to initiate formal consultation on this species that may be present in the area which would be affected, pursuant to Section 7(c) of the Endangered Species Act of 1973 (as amended). A biological assessment (or other similar document) detailing our analysis of the effects of the action will be provided.

Pursuant to Section 106 of the National Historic Preservation Act (NHPA), this public notice also constitutes a request to Indian Tribes to notify the District Engineer of any historic properties of religious and cultural significance to them that may be affected by the proposed undertaking.

In accordance with the NHPA, the District Engineer has also consulted the latest published version of the National Register of Historic Places for the presence or absence of registered properties, or properties listed as being eligible for inclusion therein, and this worksite is not included as a registered property or property listed as being eligible for inclusion in the Register. To insure that other cultural resources that the District Engineer is not aware of are not overlooked, this public notice also serves as a request to the State Historic Preservation Office to provide any information it may have with regard to historic and cultural resources.

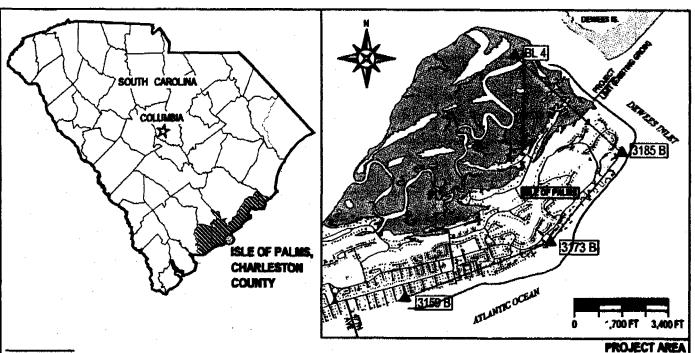
Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for a public hearing shall state, with particularity, the reasons for holding a public hearing.

The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the activity on the public interest and will include application of the guidelines promulgated by the Administrator, Environmental Protection Agency (EPA), under authority of Section 404(b) of the Clean Water Act and, as appropriate, the criteria established under authority of Section 102 of the Marine Protection, Research and Sanctuaries Act of 1972, as amended. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the project must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the project will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production and, in general, the needs and welfare of the people. A permit will be granted unless the District Engineer determines that it would be contrary to the public interest. In cases of conflicting property rights, the Corps of Engineers cannot undertake to adjudicate rival claims.

The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this project. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the activity.

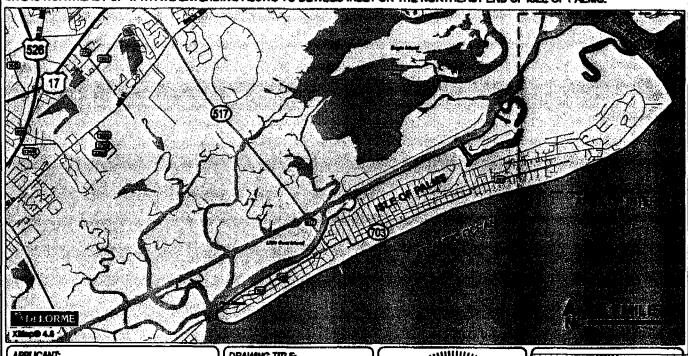
If there are any questions concerning this public notice, please contact Mary Hope Glenn at 843-329-8044 or toll free at 1-866-329-8187.

Bill Filter
Project Magnetic
SCDHEC-Quilant



DIRECTIONS:

FROM CHARLESTON, TAKE US-17 NORTH. TURN RIGHT ONTO SC 517 (ISLE OF PALMS CONNECTOR). TURN LEFT ONTO PALM BLVD. SITE IS NORTHEAST OF 47TH AVE EXTENDING ALONG TO DEWEES INLET ON THE NORTHEAST END OF ISLE OF PALMS.



APPLICANT:

CITY OF ISLE OF PALMS PO DRAWER 508 ISLE OF PALMS SC 29451

AGENT:

PM 2007-02031-21G-P (REVISED)

COASTAL SCIENCE & ENGINEERING

PO BOX 8058

COLUMBIA, SC 29202

DRAWING TITLE:

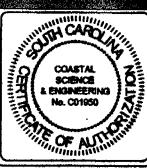
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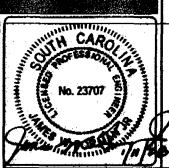
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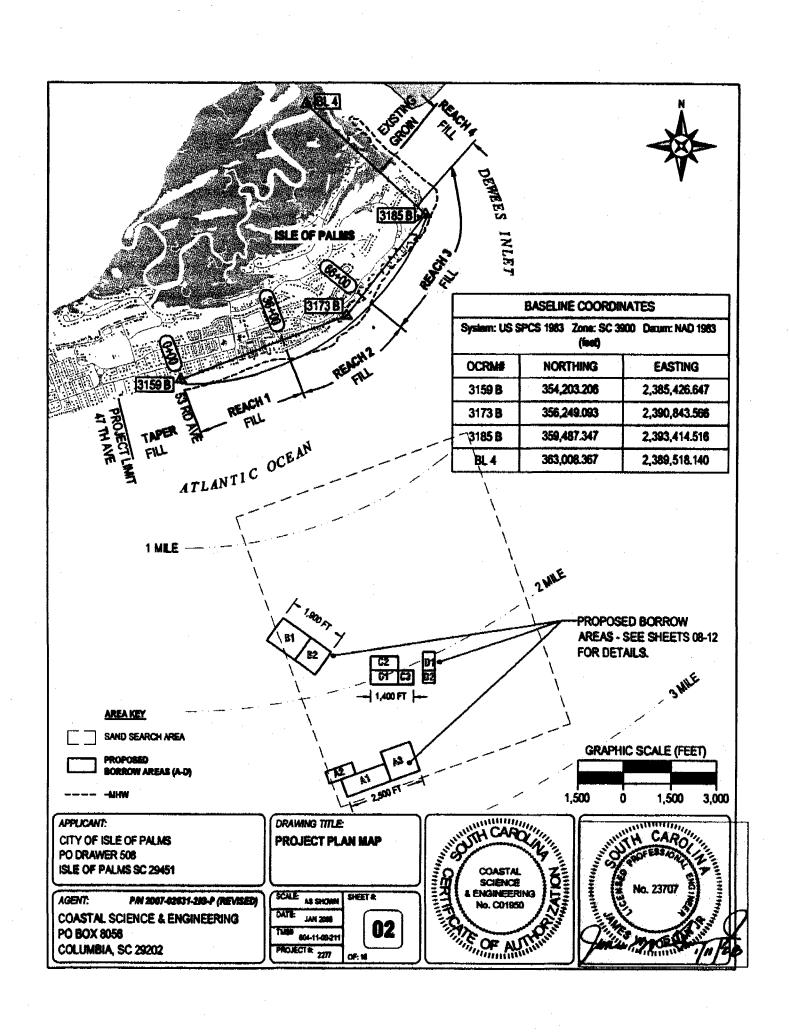
PROJECTE 2277

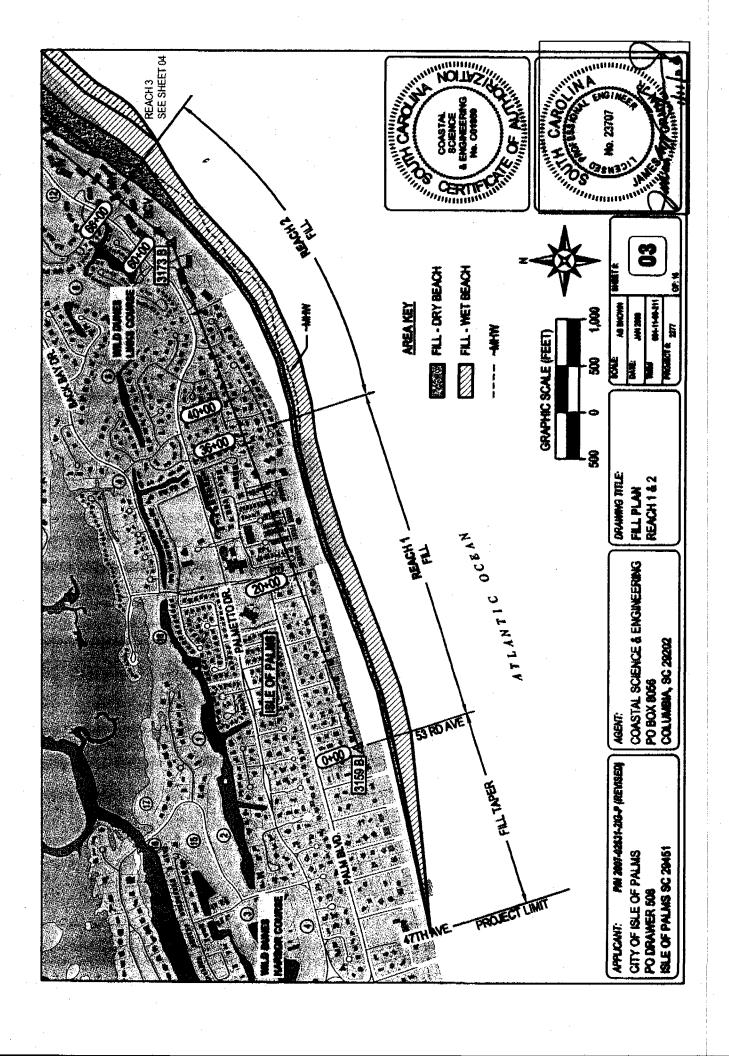
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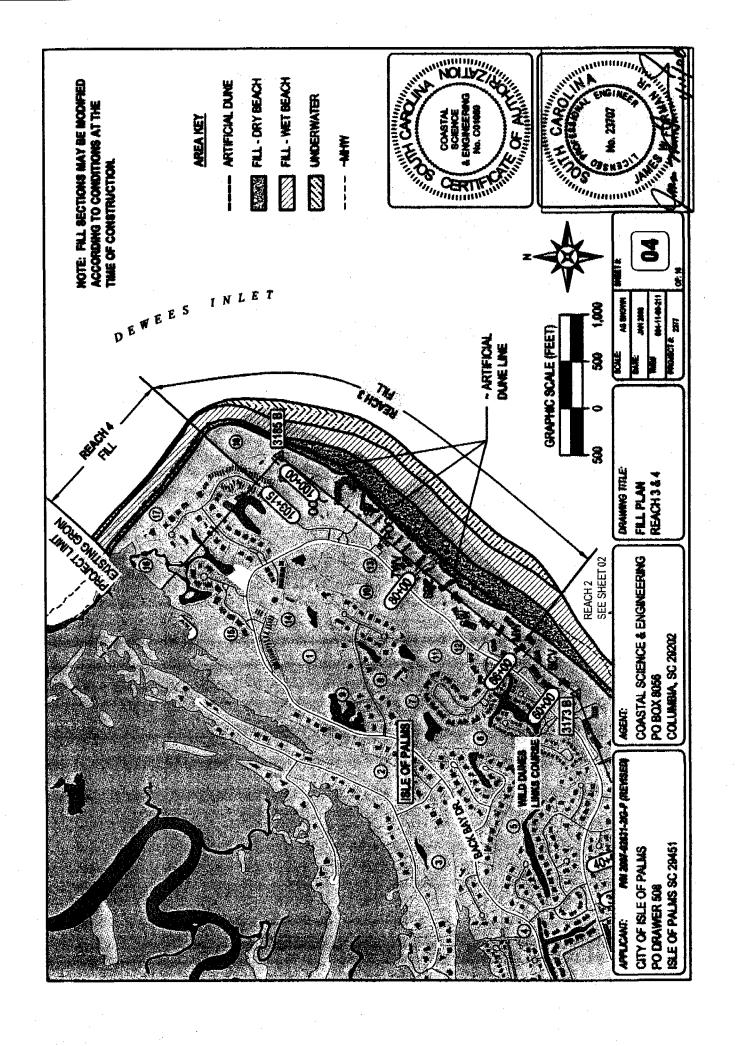
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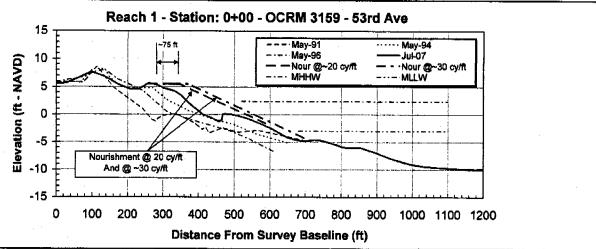


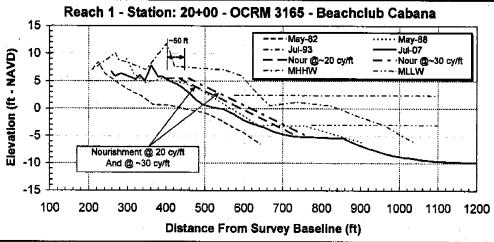


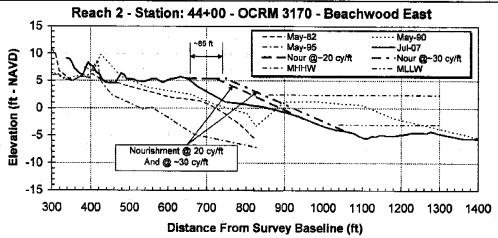










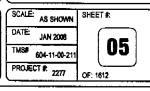


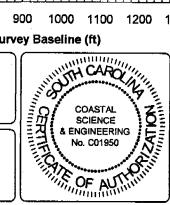
APPLICANT:
CITY OF ISLE OF PALMS
PO DRAWER 508
ISLE OF PALMS SC 29451

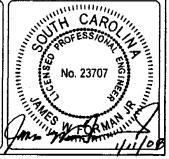
AGENT: P/N 2007-02631-21G-P (REVISED)
COASTAL SCIENCE & ENGINEERING
PO BOX 8056
COLUMBIA, SC 29202

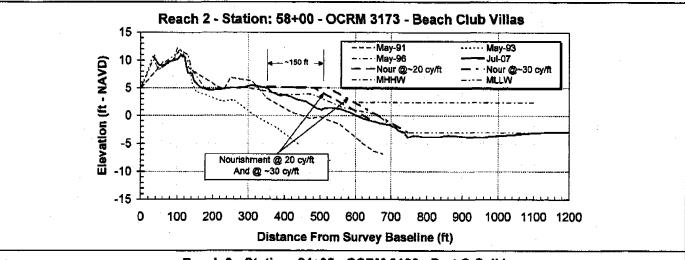
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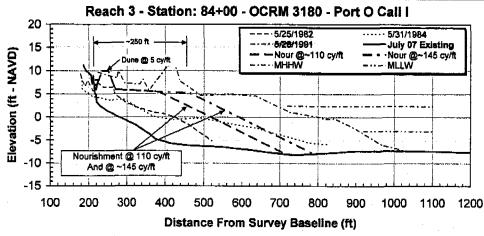
FILL SECTIONS STA 0+00 TO 44+00

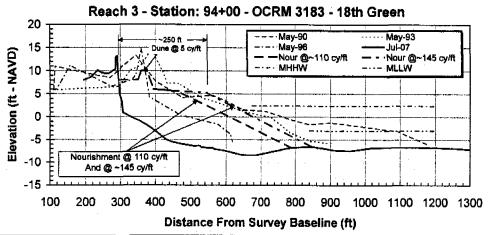










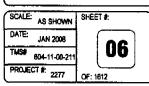


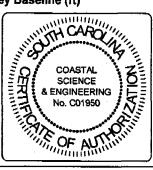
APPLICANT:
CITY OF ISLE OF PALMS
PO DRAWER 508
ISLE OF PALMS SC 29451

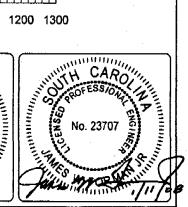
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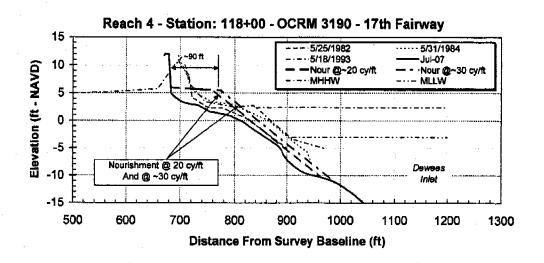
DRAWING TITLE:
FILL SECTIONS

STA 58+00 TO 94+00









NOTE: INDICATED FILL SECTIONS PROVIDE THE TYPICAL RANGE OF NOURISHMENT VOLUMES ANTICIPATED BASED ON EXISTING CONDITIONS (JULY 2007 SURVEY). SECTIONS WILL ALSO BE VARIED WITHIN EACH REACH SO AS TO CREATE SMOOTH TRANSITIONS FROM STATION TO STATION.

SOURCE DATA: COASTAL SCIENCE & ENGINEERING 1984-2007

OCRM

1988 TO PRESENT

RESEARCH PLANNING INSTITUTE

1982-1984

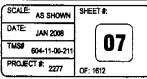
APPLICANT: CITY OF ISLE OF PALMS PO DRAWER 508 ISLE OF PALMS SC 29451

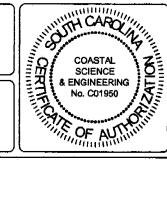
AGENT: P/N 2007-02631-2IG-P (REVISED)
COASTAL SCIENCE & ENGINEERING

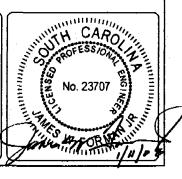
PO BOX 8056

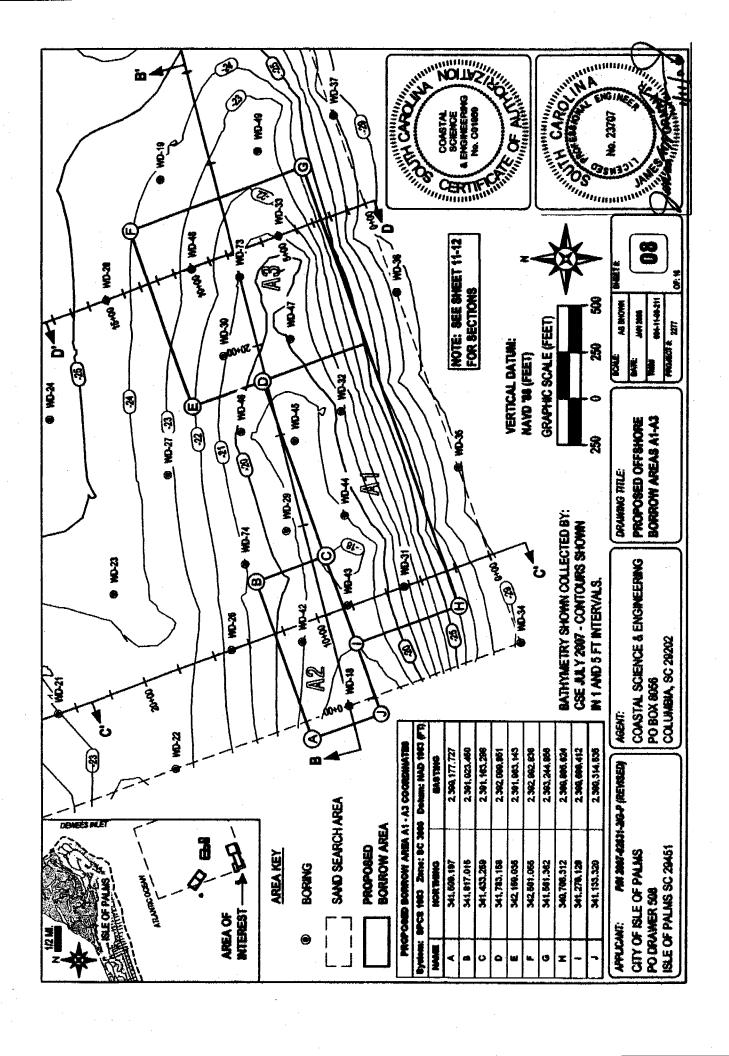
COLUMBIA, SC 29202

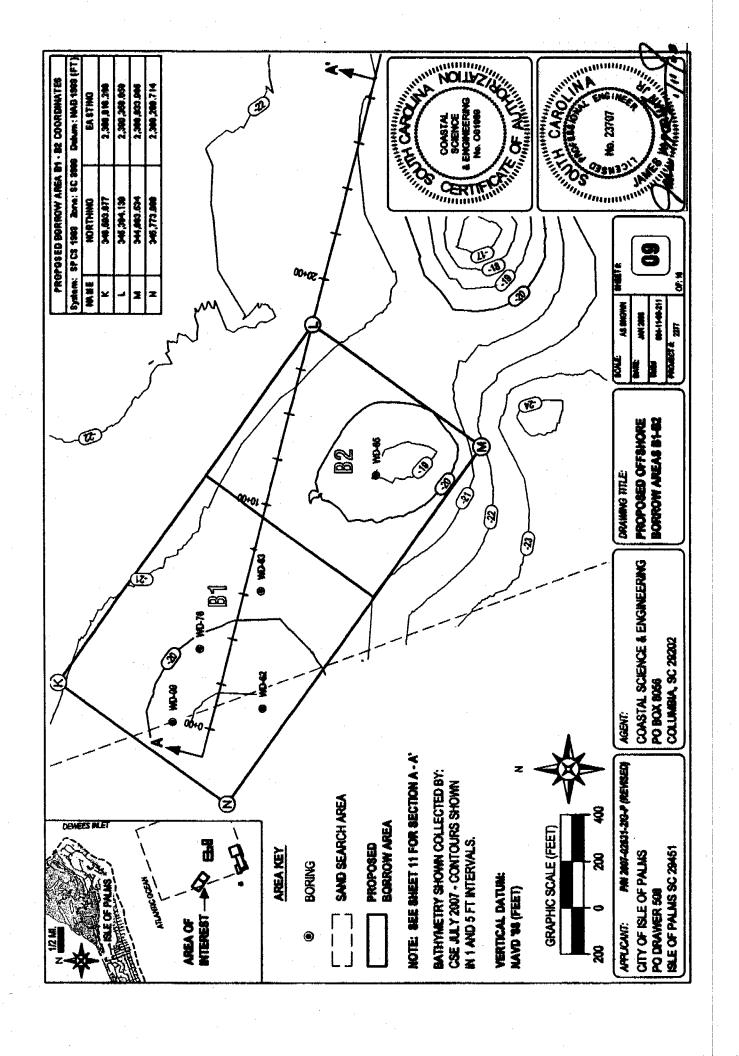
DRAWING TITLE: FILL SECTIONS STA 118+00

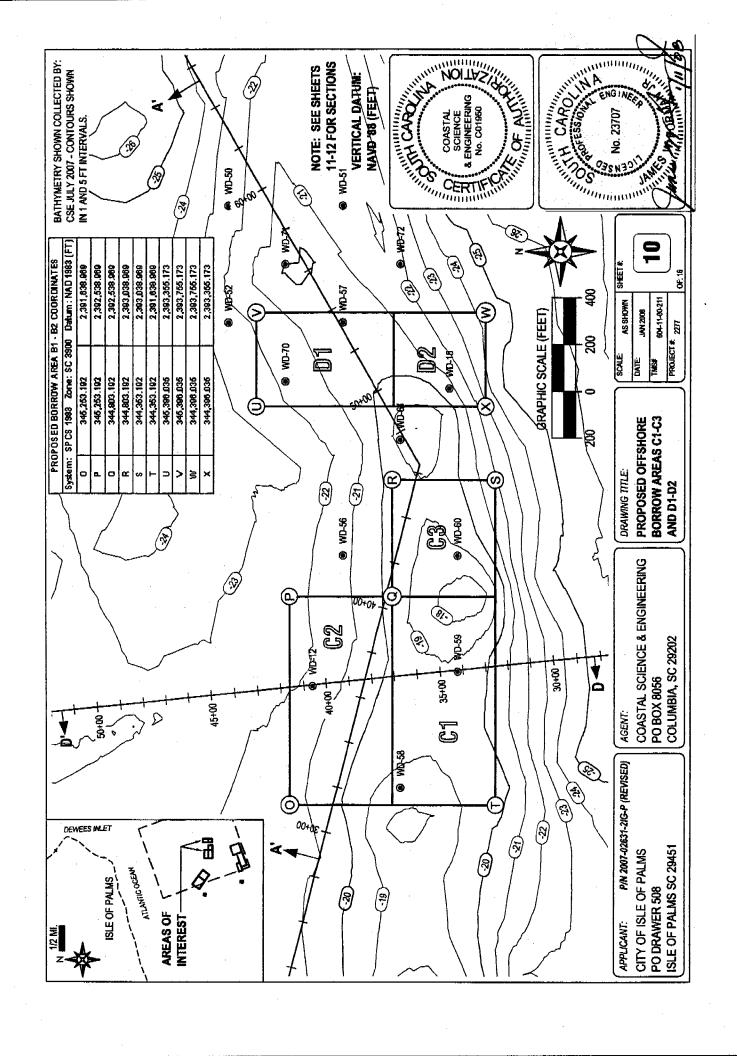


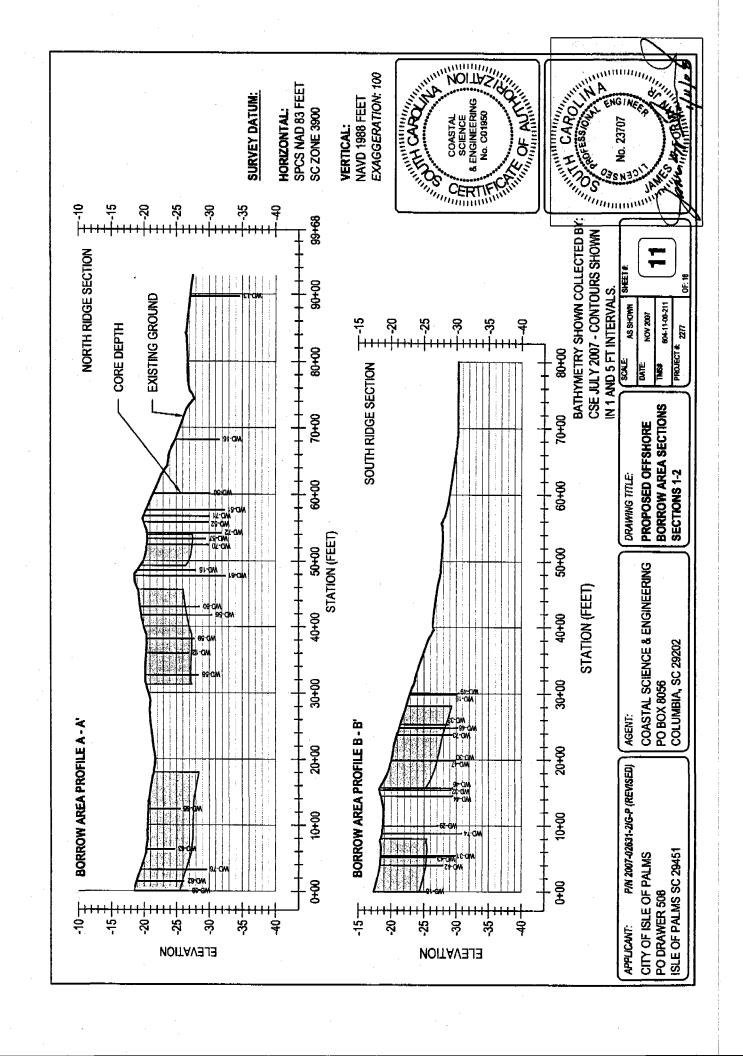


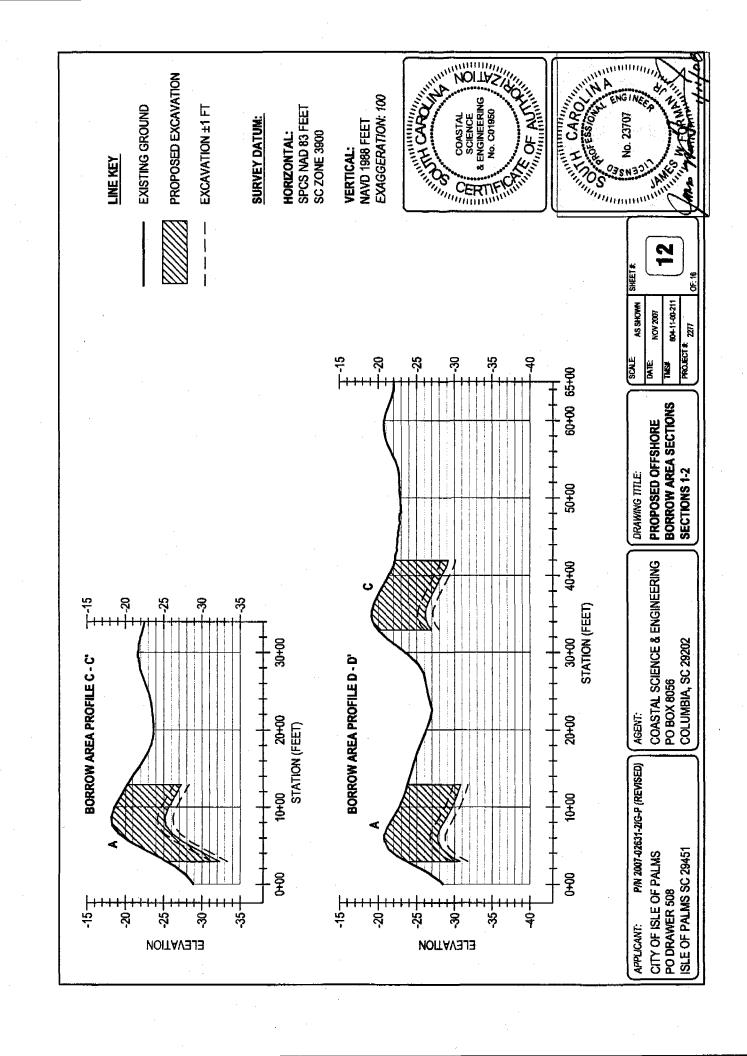












| PARAMETER | NATIVE BEACH SAMPLES (COMPOSITE) | BORROW AREA (COMPOSITES TO 8 F |
|-----------------------|----------------------------------|--------------------------------|
| MEAN GRAIN SIZE MM * | 0.253 MM | 0.408 MM |
| SORTING MM | 0.523 MM | 0.342 MM |
| PERCENT > 2 MM | 5 | 12.7 |
| PERCENT SHELL >2 MM | ~4.7 | 12.7 |
| PERCENT SHELL <2 MM | ~6.4 | 15.6 |
| OMINANT SHELL SPECIES | DONAX SP | DONAX SP |
| SEDIMENT DESCRIPTION | MEDIUM SAND | MEDIUM SAND |

SOURCE: CSE. 2007. SHORELINE ASSESSMENT AND LONG-RANGE PLAN FOR BEACH RESTORATION ALONG THE NORTHEAST EROSION ZONE, ISLE OF PALMS, SOUTH CAROLINA. COASTAL SCIENCE & ENGINEERING, COLUMBIA, SC 74 PP. & CSE 2008, GEOTECHNICAL DATA REPORT, ISLE OF PALMS BEACH RESTORATION PROJECT, COASTAL SCIENCE & ENGINEERING, COLUMBIA, SC, IN PREPERATION.

| Proposed Dredging Sub-Areas (7 ft Dredge Depth) | | | | | | | |
|---|-------------|---------|-------|---------|----------|-------------------|------------------------------|
| Sub-Area | Volume (cy) | Mz (mm) | % Mud | % Shell | % > 2 mm | % Shell < 2 mm | Core Density (acres/core) |
| A1 | 235,000 | 0.373 | 1.9 | 26.5 | 12.4 | 14.1 | 4.1 |
| А3 | 260,000 | 0.464 | 2.7 | 34.6 | 14.4 | 20.2 | 5.7 |
| B1 | 255,000 | 0.409 | 3 | 21.1 | 10.1 | 11 | 4.7 |
| C1 | 105,000 | 0.419 | 1.2 | 33.8 | 15.4 | 18.4 | 4.6 |
| D2 | 40,000 | 0.289 | 2.9 | 32.6 | 11.9 | 20.7 | 3.7 |
| Total weighted by volume) | 895,000 | 0.411 | 2.4 | 28.4 | 12.65 | 15.6 | 4.75 |

APPLICANT:

CITY OF ISLE OF PALMS PO DRAWER 508 ISLE OF PALMS SC 29451

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P/N 2007-02631-2IG-P (REVISED)

COASTAL SCIENCE & ENGINEERING

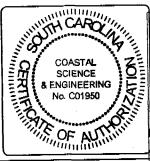
PO BOX 8056

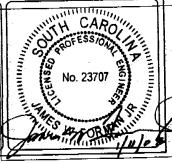
COLUMBIA, SC 29202

DRAWING TITLE:

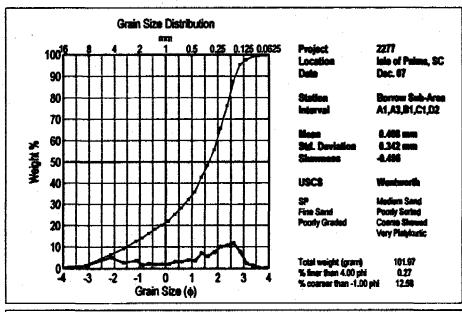
SEDIMENT **CHARACTERISTICS**

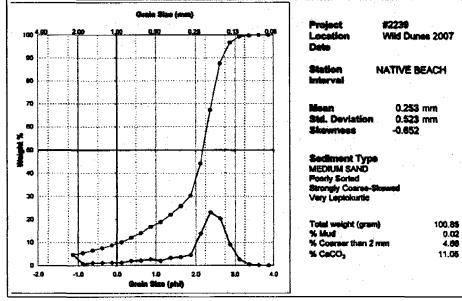
| SCALE: AS SHOWN | SHEET #: |
|--------------------|----------|
| DATE: JAN 2008 | |
| TMS# 604-11-00-211 | |
| PROJECT #: 2277 | OF: 16 |





^{*} UNWEIGHTED





SEDIMENT GRAIN-SIZE DISTRIBUTION FOR THE PROPOSED OFFSHORE BORROW SUB AREAS BASED ON A COMPOSITE SIZE DISTRIBUTION FROM SIX CORES TO A TARGET EXCAVATION THICKNESS OF -8 FT. LOWER GRAPH SHOWS A REPRESENTATIVE NATIVE BEACH COMPOSITE FOR REACHES 2 AND 3 AT WILD DUNES.

APPLICANT:

CITY OF ISLE OF PALMS PO DRAWER 508 ISLE OF PALMS SC 29451

AGENT:

PM 2007-02431-21G-P (REVISED)

COASTAL SCIENCE & ENGINEERING

PO BOX 8056

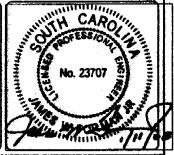
COLUMBIA, SC 29202

DRAWING TITLE:

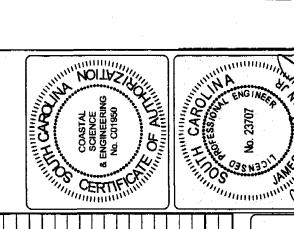
SEDIMENT CHARACTERISTICS







| | | さいりに ここしゅうこ | | 7 Reach Surface | Samples and | 1 Proposed B | ratios are Based on 2007 Beach Surface Samples and Proposed Borrow Area Cores. | | | |
|-------------------------|-----------------|-------------|--------------|-----------------|-------------|------------------|--|-------------|-------------------|-------------------|
| | | ٠, | | Mean Grain Size | n Size | | Std. Dev | , A | | |
| | Native Beach | | | (mm) | (phi) | | (mm) | (phi) | | |
| | Beach Composite | | | 0.253 | 1.984 | | 0.523 | 0.935 | | |
| | | | | | | | | | | |
| Offshore Borrow Area | | Limits | Sediment | % Mud | Moment | Moment Measures | × | > | Overfill Ratio | Overfill Ratio |
| 2007 Borings | Sample ID | (feet) | Description* | | M ⊕ | α ^Φ ρ | (Man-Man)/04n | mpg/app | (RA) | RA + Mud |
| 6 | Comp 7 | 0-7 | FS,mws,c-s | 1.23 | 2.153 | 0.694 | 0.18 | 0.74 | 1.77 | 1.78 |
| 12 | Comp 7 | 0.7 | CS,ps,sym | 1.00 | 0.729 | 1.920 | -1.34 | 2.05 | 1.08 | 1.09 |
| 15 | Comp 7 | 0-7 | MS,ps,sym | 2.87 | 1.664 | 1.213 | -0.34 | 1.30 | 1 .8 | 1.07 |
| 8 | Comp 7 | 0-7 | MS,ps,sym | 1.00 | 1.070 | 1.678 | -0.98 | 1.79 | 1.07 | 1.08 |
| 8 | Comp 7 | 7-0 | CS,ps,sym | 1.00 | 0.783 | 1,571 | -1.28 | 1.68 | 1.ജ | 1.04 |
| 31 | Comp 7 | 0-7 | MS,ps,c-s | 1.00 | 1.661 | 1.487 | -0.34 | 1.59 | 1.13 | 1.14 |
| 32 | Comp 7 | 7-0 | MS,ps,c-6 | 5.37 | 1.396 | 1.439 | -0.63 | <u>7</u> | 8 | 1.12 |
| 33 | Comp 7 | 0-7 | MS,ps,c-e | 1,00 | 1.400 | 1.414 | -0.62 | 1.51 | 1.06 | 1.07 |
| 42 | Comp 7 | 7-0 | CS,ps,sym | 1.38 | 0.696 | 1.742 | -1.38 | 1.86 | . | 1.06 |
| 43 | Comp 7 | 2-0 | MS,ps,c-s | 0.96 | 1.473 | 1.455 | -0.55 | 1.56 | 8 | 1.09 |
| 4 | Comp 7 | 0-7 | MS,ps,c-s | 1.14 | 1.212 | 1.621 | -0.83 | 1.73 | 9 | 1.09 |
| \$ | Comp 7 | 0-7 | MS,pe,c-s | 1.19 | 1.370 | 1.509 | -0.66 | 1.61 | 1.08 | 1.09 |
| 47 | Comp 7 | 2-0 | MS,ps,c-s | 1.84 | 1.254 | 1.642 | 92:0- | 1.76 | 1.09 | 1.11 |
| 84 | Comp 7 | 0-7 | MS,ps,sym | 9.13 | 1.154 | 1.559 | -0.89 | 1.67 | 1.06 | 1.15 |
| 57 | Comp 7 | 0-7 | CS,ps,sym | 2,03 | 0.667 | 1.781 | -1.41 | 1.90 | 1.85 | 1.07 |
| 85 | Comp 7 | 0-7 | MS,ps,sym | 1.33 | 1.029 | 1.712 | -1.02 | 1.83 | 1.07 | 1.09 |
| 83 | Comp 7 | 2-0 | MS,ps,c-s | 1.00 | 1.480 | 1.479 | -0.54 | 1.58 | 1.09 | 1.09 |
| 09 | Comp 7 | 2-0 | MS,ps,c-s | 7.85 | 1.880 | 1.811 | -0.11 | 1.94 | 1.28 | 1.36 |
| 62 | Comp 7 | 0.7 | CS,ps,sym | 3.38 | 0.751 | 1.510 | -1.32 | 1.61 | 1.02 | 1.05 |
| æ | Comp 7 | 2-0 | CS.ps.sym | 1.73 | 0.761 | 1.452 | -1.31 | 53: | 2. | 1.03 |
| 28 | Comp 7 | 7-0 | MS.ps.sym | 3.20 | 1.053 | 1.826 | -1.00 | 8 | 1.10 | 1.13 |
| 70 | Comp 7 | 0.7 | MS,ps,sym | 3.86 | 1.269 | 1.785 | -0.77 | 1.91 | 1.12 | 1.16 |
| ಬ | Comp 7 | 2-0 | CS.ps.sym | 1.18 | 0.952 | 1.580 | -1.10 | 89. | 2 | 1.05 |
| 76 | Comp 7 | 0-7 | MS,ps,c-s | 5.21 | 1.287 | 1.721 | -0.75 | 1.84 | 1.11 | 1.16 |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| Composite | Borrow Area | 79 | MS.ps.c-s | 2.5 | 1.220 | 1.594 | -0.82 | 1.70 | 1.07 | 1.10 |
| Composite | A1 A3 B1 C1 D2 | 72 | MS Ds c-s | 2.4 | 1.294 | 1.517 | -0.74 | 1.62 | 1.07 | 1.09 |



| SREET#. | • | 2 | 95:16 |
|----------|----------|---------------|---------|
| AS SHOWN | JAN 2008 | 604-11-00-211 | * 22T |
| SOME | DATE | #SMT | PROJECT |

| MANNING THEE | EDIMENT | COMPATIBILITY | |
|--------------|---------|---------------|--|

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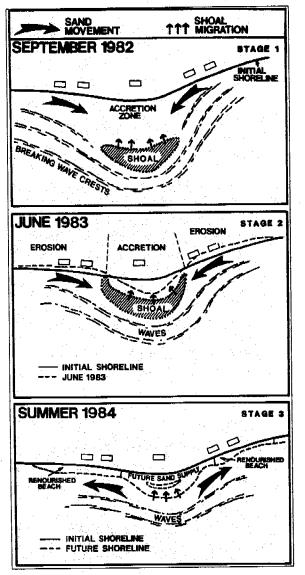
COASTAL SCIENCE & ENGINEERING PO BOX 8056 COLUMBIA, SC 29202

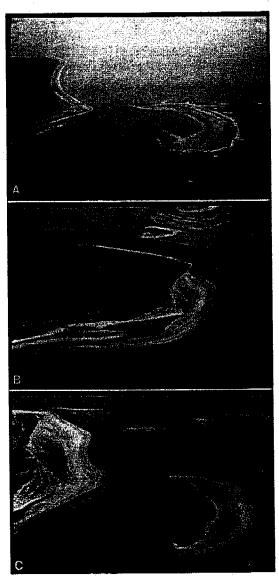
AGENT:

PAN 2007-02631-21G-P (REVISED)

APPLICANT:

CITY OF ISLE OF PALMS PO DRAWER 508 ISLE OF PALMS SC 29451





[LEFT] THE THREE STAGES OF SHOAL BYPASSING BASED ON A CASE STUDY AT DEWEES INLET/ISLE OF PALMS (AFTER KANA ET AL 1985). [RIGHT] SHOAL-BYPASS EVENT INVOLVING ~1 MILLION CUBIC YARDS OF SAND AT STONO INLET/KIAWAH ISLAND BETWEEN 1977(A) AND 1983 (B). A SUCCESSIVE EVENT BEGAN AROUND 1986 (C), CULMINATING IN ATTACHMENT AROUND 1990. VIEWS ARE LOOKING NORTH AT LOW TIDE. NOTE MAJOR CHANGES IN THE ADJACENT SHORELINE. SUCH LARGE SWINGS IN SHORELINE POSITION ARE COMMON AROUND ALL SOUTH CAROLINA INLETS. [FROM KANA ET AL 1999, FIG 6]

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PO DRAWER 508

ISLE OF PALMS SC 29451

AGENT:

COASTAL SCIENCE & ENGINEERING PO BOX 8056 COLUMBIA, SC 29202 DRAWING TITLE:

SHOAL BYPASSING STAGES

SCALE: AS SHOWN SHEET #:

DATE: JAN 2008
TMS# 804-11-00-211
PROJECT #: 2277 OF: 18

